EXHIBIT 8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§	
Jialin Zou et al.	§	Group Art Unit: 2617
	§	
Application No.: 10/954,755	§	Confirmation No.: 4332
	§	
Filed: September 30, 2004	§	Examiner: Lim, Steven
	§	
For: UTILIZATION OF OVERHEAD	§	Atty. Docket: LUCW:0015/FLE/DOO
CHANNEL QUALITY METRICS	§	Kong 11-6
IN A CELLULAR NETWORK	§	

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF PURSUANT TO 37 C.F.R. §§ 41.31 AND 41.37

This Appeal Brief is being filed in furtherance to the Notice of Appeal electronically filed with the Patent Office on May 11, 2009. Appellants hereby request a one-month extension in the statutory period.

The Commissioner is authorized to charge the requisite fee of $540.00, the one-month extension fee of $130.00, as well as any additional fees which may be required, to the credit card charge authorization submitted electronically with the present filing. However, if for any reason this charge fails, the Commissioner is authorized to charge Deposit Account No. 06-1315; Order No. LUCW:0015/FLE (Kong 11-6).

1.   **REAL PARTY IN INTEREST**

The real party of interest is Lucent Technologies Inc., Assignee of the above-referenced application by virtue of the Assignment recorded at reel 016111, frame 0909, and dated December 22, 2004. Accordingly, Lucent Technologies Inc. will be directly affected by the Board's decision in the pending appeal.

2.   **RELATED APPEALS AND INTERFERENCES**

Appellant is unaware of any other appeals or interferences related to this Appeal. The undersigned is Appellant's legal representative in this Appeal.

3.   **STATUS OF CLAIMS**

Claims 1-5, 7-14 and 16-20 are currently pending and claims 6 and 15 have been canceled. Claims 1-5, 7-14 and 16-20 are currently under final rejection and, thus, are the subject of this Appeal.

4.   **STATUS OF AMENDMENTS**

As there were no amendments made to the claims after the Final Office Action issued, there are no outstanding amendments to be considered by the Board.

5.   **SUMMARY OF CLAIMED SUBJECT MATTER**

The Application contains three independent claims, namely, claims 1, 10, and 17, all of which are the subject of this Appeal. The subject matter of these claims is summarized below.

Claims 1, 10 and 17 relate generally to the field of communication systems, and more specifically to monitoring signal paths between, for example, base stations and wireless units.

See Specification, page 10, lines 15-16. This monitoring may relate to a Channel Quality Indicator (CQI), as well as to adjusting system configurations dynamically based on the metrics associated with the quality of the CQI. *See id.* at 17-19. These metrics may include soft decision metrics, such as short-term quality metrics and long-term quality metrics, utilized, for example, to change the system configurations for the channels communicating between the wireless unit and the base station. *See id.* at lines 23-25. Through adjusting, for example, system configurations dynamically based on the metrics associated with the quality of the CQI, a wireless system's performance may be improved. *See* Specification, page 11, lines 5-6.

With regard to the aspect of the invention set forth in independent claim 1, discussions of the recited features of claim 1 can be found, at least, in the below cited locations of the specification and drawings. By way of example, present embodiments include a method generating quality metrics (*see* Specification, page 14, lines 4-6) from a decoding process (*see id.* at lines 6-11) for a received channel quality indicator (CQI) (*see id.* at lines 1-2), wherein the quality metrics (*see id.* at lines 4-6) comprise short-term soft decision quality metrics and long-term soft decision quality metrics (*see id.* at lines 13-15) that are associated with a quality of the received CQI (*see* Specification, page 10, lines 17-19), wherein the long-term soft decision quality metrics are generated by filtering frame based quality metrics over a plurality of frames (*see* Specification, page 24, line 25 – page 26, line 2), comparing at least one of the quality metrics to a quality setting (*see* Specification, page 14, lines 17-20), and determining whether to dynamically adjust a CQI channel configuration based on the comparison (*see id.* at lines 20-22 and Specification, page 15, lines 5-7).

With regard to the aspect of the invention set forth in independent claim 10, discussions of the recited features of claim 10 can be found, at least, in the below cited locations of the specification and drawings. By way of example, present embodiments include a system comprising means (*see* Fig. 1, ref. 30 and 32) for generating soft decision quality metrics (*see* Specification, page 14, lines 4-6) from a decoding process (*see id.* at lines 6-11) for a received channel quality indicator (CQI) (*see id.* at lines 1-2), wherein the

soft decision quality metrics (*see id.* at lines 4-6) comprise short-term quality metrics and long-term quality metrics (*see id.* at lines 13-15) that are associated with a quality of the received CQI (*see* Specification, page 10, lines 17-19), the long-term quality metrics being generated by accumulating the plurality of quality metrics over a period of more than one frame (*see* Specification, page 24, line 25 – page 26, line 2), means (*see* Fig. 1, ref. 34) for comparing at least one of quality metrics to a quality setting (*see* Specification, page 14, lines 17-20), and means (*see* Fig. 1, ref. 34) for determining whether to dynamically adjust a CQI channel configuration based on the comparison (*see* Specification, page 14, lines 20-22 and Specification, page 15, lines 5-7).

With regard to the aspect of the invention set forth in independent claim 17, discussions of the recited features of claim 17 can be found, at least, in the below cited locations of the specification and drawings. By way of example, present embodiments include a method comprising generating quality soft decision metrics (*see* Specification, page 14, lines 4-6) in a decoding process (*see id.* at lines 6-11) associated with a quality of the received channel quality indicator (CQI) (*see id.* at lines 1-2), wherein the soft decision metrics (*see id.* at lines 4-6) are generated using erasure metrics accumulated over a frame (*see* Specification, page 25, lines 21-25), comparing one of quality soft decision metrics to a threshold quality setting (*see* Specification, page 14, lines 17-20), and determining whether to dynamically adjust (*see* Specification, page 14, lines 19-25) at least one of a mode setting (*see id.* at line 23), a reverse link outer loop power control setting (*see id.* at lines 24-25), or a repetition factor based on the comparison (*see id.* at line 24).

6.   **GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**
     First Ground of Rejection for Review on Appeal:

The Examiner rejected claims 1-3, 5-12, 14-16, and 20 under 35 U.S.C. §103(a) as being unpatentable over Gholmieh et al., U.S. Publication No. 2003/0129989 (hereinafter "Gholmieh"), in view of Servais et al., U.S. Patent No. 6,141,388 (hereinafter "Servais") and

Lau et al., U.S. Patent No. 2004/0151122 (hereinafter "Lau"), and further in view of Seo et al., U.S. Publication No. 2003/0123396 (hereinafter "Seo").

Second Ground of Rejection for Review on Appeal:

The Examiner rejected claims 17-19 under 35 U.S.C. §103(a) as being unpatentable over Gholmieh in view of Lau, and further in view of Furuskar et al., U.S. Publication No. 2002/01202983 (hereinafter "Furuskar").

Third Ground of Rejection for Review on Appeal:

The Examiner rejected claims 4 and 13 under 35 U.S.C. §103(a) as being unpatentable over Gholmieh, Servais, Lau, and Seo as applied to claims 1 and 10, and further in view of Yun et al., U.S. Publication No. 2003/0206541 (hereinafter "Yun").

7.   ARGUMENT

As discussed in detail below, the Examiner has improperly rejected the pending claims. Further, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under 35 U.S.C. § 103(a). Accordingly, Appellant respectfully requests full and favorable consideration by the Board, as Appellant strongly believes that claims 1-5, 7-14, and 16-20 are currently in condition for allowance.

A.   Ground of Rejection No. 1:

The Examiner rejected claims 1-3, 5-12, 14-16, and 20 under 35 U.S.C. §103(a) as being unpatentable over Gholmieh in view of Servais and Lau and further in view of Seo. Appellant respectfully traverses this rejection. Appellants respectfully traverse this rejection.

Legal Precedent

Appellants respectfully traverse this rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). To establish *prima facie* obviousness of a claimed invention,

all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). However, it is not enough to show that all the elements exist in the prior art since a claimed invention composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). It is important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* Specifically, there must be some articulated reasoning with a rational underpinning to support a conclusion of obviousness; a conclusory statement will not suffice. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Indeed, the factual inquiry determining whether to combine references must be thorough and searching, and it must be based on *objective evidence of record. In re Lee*, 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002).

Omitted Features of Independent Claims 1

Independent claim 1 recites, *inter alia*, "quality metrics comprise <u>short-term soft decision quality metrics and long-term soft decision quality metrics</u> that are associated with a quality of the received CQI, wherein the long-term soft decision quality metrics are generated by <u>filtering</u> frame based quality metrics over a plurality of frames." (Emphasis added.)

In the instant application, a distinction is made between hard decisions and soft decisions. *See, e.g.,* specification, page 7, lines 13-25. As information may be lost using hard decisions, such as through the generation of erasures, soft decision metrics may provide important information about the quality of, for example, a reverse link channel quality indicator channel. *Id.* As such, independent claim 1 recites quality metrics that comprise <u>short-term soft decision quality metrics</u> and <u>long-term soft decision quality metrics</u>.

In sharp contrast, none of the cited references, alone or in hypothetical combination, teach short-term soft decision quality metrics and long-term soft decision quality metrics, as set forth in independent claim 1. The Examiner, in rejecting claim 1, cited to portions of Gholmieh that allegedly teach estimating the signal strength of the pilot signal of the base

station and suggested that this teaching anticipated short term soft decision quality metrics. *See* Final Office Action, page 2. However, Appellants respectfully assert that estimating the signal strength of the pilot signal of the base station, cited by the Examiner, cannot reasonably be considered short-term soft decision quality metrics and long-term soft decision quality metrics, as set forth in independent claim 1, at least because one of ordinary skill in the art would not consider this vague reference to estimation of signal strength to be analogous to short-term <u>soft decision quality metrics</u>. At best, it appears that the generalized estimation of signal strength in Gholmieh appears to be directed to elements such as data rate and power level, which one of ordinary skill in the art would more appropriately characterize as indicative of <u>hard</u> metrics. Accordingly, Gholmieh cannot be read as teaching

Additionally, while the Examiner admitted that Gholmieh fails to teach long-term soft decision quality metrics generated by <u>filtering</u> frame based quality metrics over a plurality of frames (*see* Final Office Action, page 3), the Examiner argued that Servais overcomes the deficiency of Gholmieh by teaching long-term soft decision quality metrics generated by <u>filtering</u> frame based quality metrics over a plurality of frames. *See id.* Appellants respectfully disagree.

The portion of Servais cited by the Examiner as teaching long-term soft decision quality metrics generated by filtering frame based quality metrics over a plurality of frames appears, at best, only to teach generating metrics associated with received data frames, averaging those metrics, and mapping the averaged metrics to provide a bit error rate estimate. *See* Servais, col. 4, lines 49-59). Not discussed in the cited portion of Servais is either the generation of long-term soft decision quality metrics or, more importantly, generation of those long-term soft decision quality metrics by <u>filtering</u> frame based quality metrics over a plurality of frames. There is simply <u>no filtering</u> taught by Servais. Accordingly, Servais fails to overcome the admitted deficiency of Gholmieh.

Furthermore, Lau and Seo fail to overcome the deficiencies of Gholmieh in this regard. In particular, Appellants are unaware of, and the Examiner has not cited to, any

portion of Lau and Seo that teach long-term soft decision quality metrics generated by <u>filtering</u> frame based quality metrics over a plurality of frames. As such, Gholmieh, Servais, Lau, and Seo, taken alone or in hypothetical combination, fail to teach all the features of independent claim 1.

Therefore, in view of the remarks set forth above, Appellants respectfully submit that the Examiner has not satisfied his burden of establishing a *prima facie* case of obviousness under Section 103 that claim 1 is obvious in view of the cited references. As such, for at least these reasons, among others, Appellants respectfully request that the Board overturn the rejection under 35 U.S.C. § 103(a) of independent claim 1, as well as all claims depending therefrom.

Omitted Features of Independent Claims 10

Independent claim 10 recites, *inter alia*, "<u>soft</u> decision quality metrics comprise <u>short-term quality metrics and long-term quality metrics</u> that are associated with a quality of the received CQI, the long-term quality metrics being generated by <u>accumulating</u> the plurality of quality metrics over a period of more than one frame." (Emphasis added.)

The Examiner, in rejecting independent claim 10, cited to portions of Gholmieh that allegedly teach estimating the signal strength of the pilot signal of the base station and suggested that this teaching anticipated short term soft decision quality metrics. *See* Final Office Action, page 2. However, similar to the arguments made above with respect to independent claim 1, Appellants respectfully assert that estimating the signal strength of the pilot signal of the base station, cited by the Examiner, cannot reasonably be considered <u>soft</u> decision quality metrics comprising short-term quality metrics and long-term quality metrics, as set forth in independent claim 10. That is, one of ordinary skill in the art would not consider this vague reference to estimation of signal strength to be analogous to <u>soft</u> decision quality metrics. At best, it appears that the generalized estimation of signal strength in Gholmieh appears to be directed to elements such as data rate and power level, which one of ordinary skill in the art would more appropriately characterize as indicative of <u>hard</u> metrics,

and not <u>soft</u> decision quality metrics comprising short-term quality metrics and long-term quality metrics, as set forth in independent claim 10.

Additionally, as discussed above, the Examiner admitted that Gholmieh fails to teach long-term soft decision quality metrics generated by <u>filtering</u> frame based quality metrics over a plurality of frames but argued that Servais overcomes the deficiency of Gholmieh by teaching long-term soft decision quality metrics generated by <u>filtering</u> frame based quality metrics over a plurality of frames. *See* Final Office Action, page 3. However, the Examiner has failed to set forth a similar rejection (or any rejection) for all of the elements of claim 10. *See* Final Office Action, page 3. Specifically, the Examiner has wholly failed to set forth <u>any</u> teachings in the prior art of long-term quality metrics generated by <u>accumulating</u> the plurality of quality metrics over a period of more than one frame, as set forth in independent claim 10.

Moreover, Appellants are unaware of any teachings in the prior art of record that teach long-term quality metrics generated by <u>accumulating</u> the plurality of quality metrics over a period of more than one frame. For example, Servais cannot be read as teaching the aforementioned recitation. Servais appears to teach generating metrics associated with received data frames, averaging those metrics, and mapping the averaged metrics to provide a bit error rate estimate. *See* Servais, col. 4, lines 49-59. However, Servais does not appear to generate long-term quality metrics generated by <u>accumulating</u> the plurality of quality metrics over a period of more than one frame, as set forth in independent claim 10. Thus, because Appellants have been unable to find any portion of the cited prior art that teaches long-term quality metrics generated by <u>accumulating</u> the plurality of quality metrics over a period of more than one frame, and because the Examiner has simply not set forth any portions of the prior art that teach long-term quality metrics generated by <u>accumulating</u> the plurality of quality metrics over a period of more than one frame, Appellants respectfully submit that the Examiner made an improper Section 103 rejection over independent claim 10.

Accordingly, at least because every element has not been shown to be taught in the prior art of record, Appellants respectfully submit that the Examiner has failed to satisfy his

burden of establishing a *prima facie* case of obviousness under Section 103 that claim 10 is obvious in view of the cited references. Therefore, in view of the remarks set forth above, Appellants respectfully request that the Board overturn the rejection under 35 U.S.C. § 103(a) of independent claim 10, as well as all claims depending therefrom.

B.   Ground of Rejection No. 2:

The Examiner rejected claims 17-19 under 35 U.S.C. §103(a) as being unpatentable over Gholmieh in view of Lau, and further in view of Furuskar.

Legal Precedent

Appellants respectfully traverse this rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). However, it is not enough to show that all the elements exist in the prior art since a claimed invention composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). It is important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* Specifically, there must be some articulated reasoning with a rational underpinning to support a conclusion of obviousness; a conclusory statement will not suffice. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Indeed, the factual inquiry determining whether to combine references must be thorough and searching, and it must be based on *objective evidence of record. In re Lee*, 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002).

Omitted Features of Independent Claims 17

Independent claim 17 recites, *inter alia*, "generating quality <u>soft decision metrics</u> in a decoding process associated with a quality of the received channel quality indicator (CQI),

wherein the soft decision metrics are generated using <u>erasure metrics accumulated over a frame</u>." (Emphasis added.)

The Examiner, in rejecting independent claim 17, cited to portions of Gholmieh that allegedly teaching estimating the signal strength of the pilot signal of the base station and suggested that this teaching anticipated short term soft decision quality metrics. *See* Final Office Action, page 6. However, Appellants respectfully assert that estimating the signal strength of the pilot signal of the base station, cited by the Examiner, cannot reasonably be considered <u>soft</u> decision quality metrics comprising short-term quality metrics and long-term quality metrics, as set forth in independent claim 17, as one of ordinary skill in the art would not consider this vague reference to estimation of signal strength to be analogous to <u>soft</u> decision quality metrics. At best, it appears that the generalized estimation of signal strength in Gholmieh appears to be directed to elements such as data rate and power level, which one of ordinary skill in the art would more appropriately characterize as indicative of <u>hard</u> metrics, and not <u>soft</u> decision quality metrics comprising short-term quality metrics and long-term quality metrics, as set forth in independent claim 10.

Additionally, while the Examiner admitted that Gholmieh fails to teach soft decision metrics are generated using <u>erasure metrics accumulated over a frame</u> (*see* Final Office Action, pages 6-7), the Examiner argued that Furuskar overcame the deficiency of Gholmieh by soft decision metrics are generated using erasure metrics accumulated over a frame. *See* Final Office Action, page 7. Appellants respectfully disagree.

The portion of Furuskar cited by the Examiner as teaching soft decision metrics are generated using erasure metrics accumulated over a frame appears, at best, only to teach various types of measurement of radio channel quality being substituted for a carrier-to-interference measure of Quality of Service of a user. *See* Furuskar, paragraph 37. Included in the teachings of Furuskar is that a Frame Erasure Rate (FER) may be utilized as a substitute for a carrier-to-interference measure of Quality of Service of a user. However, not taught in the cited portion of Furuskar is either the generation of soft decision metrics or,

more importantly, generation of those soft decision metrics by using <u>erasure metrics accumulated over a frame</u>. Indeed, contrary to the position of the Examiner, mere reference in Furuskar to the availability of Frame Erasure Rate (FER) as a substitute for a carrier-to-interference measure of Quality of Service of a user cannot be read as teaching soft decision metrics are generated using erasure metrics accumulated over a frame at least because there is simply no <u>accumulation</u> step taught in Furuskar. Accordingly, Furuskar fails to overcome the admitted deficiency of Gholmieh.

Additionally, Lau fails to overcome the deficiencies of Gholmieh in this regard. In particular, Appellants are unaware of, and the Examiner has not cited to, any portion of Lau that soft decision metrics generated using erasure metrics <u>accumulated</u> over a frame. As such, Gholmieh, Servais, and Lau, taken alone or in hypothetical combination, fail to teach all the features of independent claim 17.

Therefore, in view of the remarks set forth above, Appellants respectfully submit that the Examiner has not satisfied his burden of establishing a *prima facie* case of obviousness under Section 103 that claim 17 is obvious in view of the cited references. As such, for at least these reasons, among others, Appellants respectfully request that the Board overturn the rejection under 35 U.S.C. § 103(a) of independent claim 17, as well as all claims depending therefrom.

C.   **Ground of Rejection No. 3:**

The Examiner rejected claims 4 and 13 under 35 U.S.C. §103(a) as being unpatentable over Gholmieh, Servais, Lau, and Seo as applied to claims 1 and 10, and further in view of Yun.

Legal Precedent

Appellants respectfully traverse this rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214

U.S.P.Q. 735 (B.P.A.I. 1979). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974). However, it is not enough to show that all the elements exist in the prior art since a claimed invention composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). It is important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id*. Specifically, there must be some articulated reasoning with a rational underpinning to support a conclusion of obviousness; a conclusory statement will not suffice. *In re Kahn,* 441 F.3d 977, 988 (Fed. Cir. 2006). Indeed, the factual inquiry determining whether to combine references must be thorough and searching, and it must be based on *objective evidence of record*. *In re Lee,* 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002).

Claims 4 and 13

The Examiner rejected claims 4 and 13 under Section 103 in view of Gholmieh, Lau, and Yun. However, Yun fails to overcome the deficiencies of Gholmieh and Lau with respect to claims 1 and 10. Yun is directed to a switch frame and a method for transmitting a switch frame at a mobile station. *See* Yun, paragraph 3. Appellants are unable to find, and the Examiner did not cite, any portion of Yun that can reasonably be considered to teach long-term soft decision quality metrics are generated by <u>filtering</u> frame based quality metrics over a plurality of frames, as set forth in independent claim 1, or long-term quality metrics being generated by <u>accumulating</u> the plurality of quality metrics over a period of more than one frame, as set forth in independent claim 10. Accordingly, Appellants respectfully assert claims 4 and 13 are allowable based on their respective dependency from claims 1 and 10 and request that the Board overturn the rejection under 35 U.S.C. § 103(a) of claims 4 and 13.

Conclusion

Appellant respectfully submits that all pending claims are in condition for allowance. However, if the Examiner or Board wishes to resolve any other issues by way of a telephone conference, the Examiner or Board is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: August 11, 2009   /Matthew C. Dooley/ _____
                                          Matthew C. Dooley
                                          Reg. No. 61,996
                                          FLETCHER YODER
                                          P.O. Box 692289
                                          Houston, TX 77269-2289
                                          (281) 970-4545

8.   **CLAIMS APPENDIX**

Listing of Claims:

1.   A method comprising:

generating quality metrics from a decoding process for a received channel quality
        indicator (CQI), wherein the quality metrics comprise short-term soft decision
        quality metrics and long-term soft decision quality metrics that are associated
        with a quality of the received CQI, wherein the long-term soft decision quality
        metrics are generated by filtering frame based quality metrics over a plurality
        of frames;

comparing at least one of the quality metrics to a quality setting; and

determining whether to dynamically adjust a CQI channel configuration based on the
        comparison.

2.   The method, as set forth in claim 1, wherein the CQI channel configuration
comprises a R-CQICH mode setting of a full mode or a differential mode, and the
comparison comprises comparing one of the long-term quality metrics to the quality setting.

3.   The method, as set forth in claim 1, wherein the CQI channel configuration
comprises a reverse link outer loop power control setting, and the comparison comprises
comparing one of the short-term quality metrics to the quality setting.

4.   The method, as set forth in claim 1, wherein the CQI channel configuration
comprises a repetition factor, and the comparison comprises comparing one of the long-term
quality metrics to the quality setting.

5.   The method, as set forth in claim 1, comprising generating the short-term
quality metrics by accumulating a plurality of quality information from the decoding process
over a CQI frame.

7.   The method, as set forth in claim 1, comprising generating a plurality of erasures for differential reports based on a CQI differential bit decision metric.

8.   The method, as set forth in claim 1, wherein the method is performed at a base station in a wireless communications system.

9.   The method, as set forth in claim 1, comprising transmitting an adjustment for the CQI channel configuration to a wireless unit.

10.   A system comprising:

means for generating soft decision quality metrics from a decoding process for a received channel quality indicator (CQI), wherein the soft decision quality metrics comprise short-term quality metrics and long-term quality metrics that are associated with a quality of the received CQI, the long-term quality metrics being generated by accumulating the plurality of quality metrics over a period of more than one frame;

means for comparing at least one of quality metrics to a quality setting; and

means for determining whether to dynamically adjust a CQI channel configuration based on the comparison.

11.   The system, as set forth in claim 10, wherein the CQI channel configuration comprises a R-CQICH mode setting of a full mode or a differential mode, and the means for comparing compares one of the long-term quality metrics to the threshold quality setting.

12.   The system, as set forth in claim 10, wherein the CQI channel configuration comprises a reverse link outer loop power control setting, and the means for comparing compares one of the short-term quality metrics to the threshold quality setting.

13.   The system, as set forth in claim 10, wherein the CQI channel configuration comprises a repetition factor, and the means for comparing compares one of the long-term quality metrics to the threshold quality setting.

14.   The system, as set forth in claim 10, wherein the means for generating quality metrics comprising a means for generating the short-term quality metrics by accumulating a plurality of quality information from the decoding process over a CQI frame.

16.   The system, as set forth in claim 10, wherein the system is performed at a base station in a wireless communications system.

17.   A method comprising:

generating quality soft decision metrics in a decoding process associated with a
        quality of the received channel quality indicator (CQI), wherein the soft
        decision metrics are generated using erasure metrics accumulated over a
        frame;

comparing one of quality soft decision metrics to a threshold quality setting; and

determining whether to dynamically adjust at least one of a mode setting, a reverse
        link outer loop power control setting, or a repetition factor based on the
        comparison.

18.   The method, as set forth in claim 17, wherein the mode setting comprises a full mode or a differential mode setting.

19.   The method, as set forth in claim 17, comprising transmitting an adjustment to a wireless unit if the determination is to dynamically adjust at least one of the mode setting, the reverse link outer loop power control setting, or the repetition factor.

20.   The method, as set forth in claim 10, wherein generating quality metrics comprises generating long-term metrics by accumulating the plurality of quality metrics over a period of more than one frames.

9.   **<u>EVIDENCE APPENDIX</u>**

None.

Application No. 10/954,755
Appeal Brief
Page 20

10.   **RELATED PROCEEDINGS APPENDIX**

None.